

## REMARKS

### **Status of the Application**

In the office action dated June 28, 2005, Claims 1-9 were subject to election and restriction requirements. In response thereto, Claim 1 has been amended and Claims 3, 4, 6 and 9 have been cancelled. Claims 2, 5, 7 and 8 are original claims.

### **Election/Restrictions**

Claims 1-9 were subject to a restriction requirement. Group I claims were said to be drawn to a method of coating, i.e., Claim 1-8 and Group II, Claim 9 to an article. Prosecution of Group I claims was elected and Claim 9 has been cancelled.

Claims 1-8 were then subjected to a election of species. Claims 3, 4, and 6 were canceled. At a later date Applicants will make a decision on filing a divisional application to the non-elected claims.

Claim 1 was amended to curing by thermal energy or high energy radiation selected from the group consisting of electron beam radiation or UV radiation of the coating before removal of the backing foil. These methods of curing are obvious variants. Also, Claim 1 is directed to curing of the coating prior to removal of the backing foil, after removal of the backing foil or curing prior to and after removal of the backing foil. These are also obvious variants. When the coating is cured is not critical to the invention. The key point of applicants invention is that the coating has been applied by screen printing that is not taught by the prior art. Claim 6 was canceled to comply with the election requirement to direct the invention to free radical polymerization.

### **Claim Rejection – 35 USC § 112**

Claim 8 was rejected on the basis of clarity since the plural was said to be used for “substrates” whereas Claim 1 is in the singular. However, Claim 8 uses the singular for “substrate” and not the plural.

Obviously, a minor point that can easily be amended as required when the Examiner clarifies the rejection.

### **Applicants' Invention**

Before going into details of the claims rejections under 35 U.S.C. 102 and 103, applicants will briefly point out key points of their invention not taught or suggested by the cited prior art references. Applicants invention is directed to coating, in particular, automotive substrates and not fabrics, as is taught, for example, by Rattee et al. U.S. 4,315,790. The claims have been amended to non-fabric substrates. In amended Claim 1, the substrates are directed to metal, plastic, wood and glass which are not fabrics and Claim 7, which is dependent on Claim 1, is directed to vehicle bodies, body parts and fittings, again, not fabrics.

Also, another key element that is not disclosed or taught by the references is that the coating that is being transferred to the substrate is applied to the backing foil by screen printing. The advantages of screen printing are clearly pointed out in the specification on page 1, lines 22-27, where low productivity of spray on coatings and coating loss is noted and on page 19, lines 1-6, the advantages of screen printing to provide a coating of a very uniform thickness and the ability of being able to provide images are pointed out. These advantages are not taught or suggested by the prior art references cited.

### **Claim Rejections – 35 USC § 102**

Claims 1-2, 5 and 8 were rejected under 35 U.S.C. 102(b) as being anticipated by Rattee et al. U.S. 4,315,790, hereinafter referred to as '790. The rejection stated that '790 teaches the application of a composition to a fabric where the composition is comprised of a dye or pigment, film forming polymer, crosslinking agent and catalyst. Screen printing can be used to apply the composition to a supporting substrate and the composition is transferred to the fabric by pressing and heating.

Applicants' amended claims are directed to a substrate of metal, plastic, wood and glass. Clearly, these are not the "fabric" substrates taught by '790. Claim 7 in which the substrate is a vehicle body, body parts and body fittings are applicants' preferred substrates. None of which are fabrics.

The Examiner states that in Examples 1 and 2 of '790 screen printing of a coating is taught. A close reading of the examples shows that a coating is first applied to the paper substrate and the coating is dried and then screen printed with an ink which is not a coating as used in applicants process. Obviously, when the coating is applied to the substrate and dried, it has all the disadvantages of the prior art, i.e., non-uniform varied thickness. Applicants avoid this by applying the coating directly to the backing foil by screen printing which is not taught by '790.

The following table compares the structure of the materials used in applicants' process to '790. As can be readily seen the two are distinctly different.

Invention	U.S. 4,315,790
Backing Foil	Paper Carrier
Uncured or partially cured coating Applied by Screen Printing	Coating (not applied by Screen Printing)
	Screen print Design
Non-fabric Substrate	Fabric Substrate

In view of the above comments, it is clear that '790 does not anticipate applicants amended claims and the rejection should be withdrawn.

**Claim Rejection under 35 USC § 103**

Claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over Rattee et al. U.S. 4,315,790. In the rejection, the Examiner recognized that '790 does not teach the application to vehicle body, or body part or body fitting but pointed out that the fabric of '790 could be part

of the automobile. In view of applicants amendments to the claims, it is clear that fabric is not included. Claim 1 on which Claim 7 is directly dependent on is to metal, plastic, wood or glass and not a fabric.

In '790 there is no disclosure or suggestion that the coating can be screen printed on the substrate. Applicants do not use a screen print design and use a non-fabric substrate whereas '790 is directed to decoration of fabrics and not the substrates set forth in the amended claims. Amended claims are clearly directed to a process not taught or suggested by '790 and the obviousness rejection should be withdrawn.

Claims 1, 2, 5, 7 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over George U.S. 4,061,516 taking in view of Vogels et al. U.S. 2002/0011575 or Rattee et al. U.S. 4, 315,790. None of these references alone or in combination teach or suggest applicants invention as set forth in the amended claims.

'516 is directed to repairing printed wood grain patterns of furniture components. The sheet structure used by '516 is substantially different from that used in applicants' process. '516 sheet comprises a carrier sheet with a printed design thereon over which an opaque coating is applied and then an adhesive layer. There is no suggestion or teaching that any of these layer can be omitted nor is there any such teaching in either '575 or '790 that certain layers could be eliminated from the '516 structure. Again a visual comparison of the '516 structure and the coated backing foil used in applicants' process is made as follows:

Invention	George et al. U.S. 4,061,516 <u>'516</u>
Backing Foil	Carrier
Uncured or partially cured coating Applied by Screen Printing	Printed Design
	Opaque Coating (not applied by screen printing)
	Adhesive Layer
Non-fabric Substrate	Substrate

Applicants amended process claims are directed to using a backing foil that consist of a foil and the uncured or partially cured coating that is applied by screen printing. The amended claims do not cover the multiple layer sheet structure of '516 as is clearly shown above.

'575 was cited by the Examiner to show that screen printing can be used to apply acrylic layer to another layer. However, '575 teaches the production of multilayer composite sheet materials by laminating radiation curable layers together and curing the layers by radiation. '575 has nothing to do with the use of backing foils coated with a curable coating layer used to coat a substrate which is applicants' invention as set forth in the amended claims and has nothing to do with the repair technique taught by '516. There is no motivation to combine the teachings of '575 with '516 and even if one did as suggested by the Examiner, applicants' novel process as claimed would not result. As shown above, '516 has many more layers of components in the sheet as does applicants and simply is not the process that is claimed by applicants. The many deficiencies of '790 have been pointed out above and will not be repeated here. Neither '575 nor '516 make up for these deficiencies of '790. In view of the above

discussion, the obviousness rejection of the claims based on the combination of '516, '575 and '790 should be withdrawn.

Claims 1, 2, 5, 7 and 8 were also rejected under 35 U.S.C. 103(a) as being unpatentable over W0 95/02461 ('461) taken in view of Vogels et al. U.S. 2002/0011575 ('571) or Rattee U.S. 4,315,790 ('790). '461 is directed to a process for the partial metallization of a substrate wherein an extremely thin layer of metallic particles are deposited on a transfer agent (plastic film) and then a varnish layer is applied to the transfer agent or substrate or both in discrete strips and the transfer agent and the substrate are laminated together and the varnish is cured. The metallic particles become absorbed or embedded into the varnish coat which bonds the particles to the substrate thereby providing discrete metal strips. That clearly is not Applicants' invention as set forth in the amended claims. Applicants do not apply a metallic coating or strips of a metallic coating to a substrate.

Applicants' amended claims clearly state that a backing foil "consisting of" a foil coated on one side with a uncured or partially cured coating layer of a thermally curable coating composition, with its coated side is applied on the surface of the substrate". There is no metallic layer or coating. The claims do not embrace or cover a metallic layer or coating of metallic particles as set forth in '461. The whole concept of '461 is the application of a metallic layer to a substrate by embedding metallic particles in a varnish which is simply not done in Applicants' process.

'575 as pointed out above is directed to forming laminates and not to forming coatings on substrates. The numerous deficiencies of '790 have also been pointed out above and will not be repeated here.

The Examiner's summary on this rejection appears to be flawed. The rejection stated as follows: "It would have been obvious to one of ordinary skill in the art to have used the '575 screen printing technique or the '790 screen printing technique in the '516 process, because both teach that screen printing is a conventional method of applying a curable material to a support." '516 reference was not mentioned in this rejection.

It is believed that the '461 reference was meant to be cited. Even if one would use screen printing in the '461 process as suggested by the Examiner but not taught or suggested by either the '575 or '790 references, applicants' process as set forth in the amended claims would not be taught since '461, as pointed out above, requires the presence of a metallic layer which is not embraced by applicants' amended claims that require a backing foil that "consists of" a foil coated with an uncured or partially cured coating that is applied by screen printing. The obviousness rejection based on '461, '575 and '790 should be withdrawn.

**Double Patenting Rejections**

Claims 1, 2, 5 - 8 were rejected under the judicially created doctrine of obviousness double patenting over Claims 1, 4 and 5 of co-pending application Se. No. 10/017,132 ('132) and over Claims 1, 2, 6, 7 and 10 of co-pending application 10/611,731 ('731). Since DuPont has 100% ownership of the subject application and the aforementioned co-pending applications, a terminal disclaimer has been submitted for each of the co-pending applications which obviates this double patenting rejection.

**Provisional Obviousness Rejection under 35 USC § 103**

Claims 1, 2, 5, 7 and 8 were provisionally rejected under 35 U.S.C. § 103(a) as being obvious over co-pending application Se. No 10/017,132 ('132) where both the subject application ('384) and '132 application are commonly assigned to DuPont. The process of '132 is significantly different from the subject application ('384) in that '132 is directed to a process for the repair of coatings; hence, the "blemished area in the automotive substrate" is required as set forth in the claims of '132. In contrast, '384 is not directed to repairing blemished areas of an automotive coating but to applying an entire coating layer to a substrate. Also, '132 is specifically directed to curing with infrared radiation (IR) or near infra red radiation (NIR) whereas '384 is directed to thermal curing, electron beam curing or UV radiation curing. The most important difference is that the

uncured or partially cured coating on the backing foil in '384 is applied by screen printing which is not taught by '132. The advantages thereof have been pointed out earlier in this response and will not be repeated. There are no teachings or suggestions in '132 that would suggest that the coating layer could be applied by screen printing.

Further, the '384 application and the co-pending '132 application were at the time the invention of the '384 application was made were both owned by the same party (E.I. du Pont de Nemours and Company) and therefore, the co-pending '132 application is not prior art under 35 U.S.C. 103(c). In view of the above, the provisional rejection based on obviousness of the claims in view of the co-pending '132 application should be withdrawn.

Claims 1, 2, 5, 7 and 8 also were provisionally rejected under 35 U.S.C. § 103(a) as being obvious over co-pending application Se. No 10/017,131 ('131) where both the subject application ('384) and '131 application are commonly assigned to DuPont. The process of '131 is significantly different from the subject application ('384) in that '384 requires uncured or partially cured coating on the backing foil in that is applied by screen printing. The advantages thereof have been pointed out earlier in this response and will not be repeated. There are no teachings or suggestions in '131 that would suggest that the coating layer could be applied by screen printing.


Further, the '384 application and the co-pending '131 application were at the time the invention of the '384 application was made were both owned by the same party (E.I. du Pont de Nemours and Company) and therefore, the co-pending '131 application is not prior art under 35 U.S.C. 103(c). In view of the above, the provisional rejection based on obviousness of the claims in view of the co-pending '131 application should be withdrawn.

**SUMMARY**

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Please charge the fee due for the Terminal Disclaimers and any other fee due which is not accounted for to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

Date: September 19, 2005

  
\_\_\_\_\_  
Hilmar L. Fricke  
Reg. No. 22,384  
Attorney for Applicants  
Phone: (302) 984-6058  
Facsimile: (302) 658-1192